

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Current Capability and High Efficiency
- Epoxy Meets UL 94 V-0 Flammability Ratings Isolated Package: ITO-220AC

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 4°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1545FA	MBR1545FA	45V	31.5V	45V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current	$I_{F(AV)}$	15A	$T_C=115^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	250A	8.3ms, Half Sine Wave
Maximum Instantaneous Forward Voltage	V_F	0.55V(Typ) 0.60V(Max) 0.52V(Typ) 0.57V(Max)	$I_F=15A \ T_J=25^\circ\text{C}$ $I_F=15A \ T_J=25^\circ\text{C}$ $I_F=15A \ T_J=125^\circ\text{C}$ $I_F=15A \ T_J=125^\circ\text{C}$
DC Reverse Current at Rated DC Blocking Voltage	I_R	25 μA (Typ) 0.2mA(Max) 40mA(Max)	$T_J=25^\circ\text{C}$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Typical Junction Capacitance	C_J	635pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Isolation Voltage	V_{AC}	2000V	

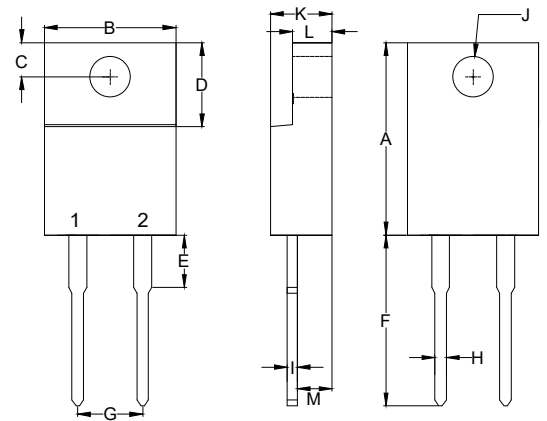
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

Internal Structure



15 Amp Schottky Barrier Rectifier 45 Volts

ITO-220AC



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.567	0.606	14.40	15.40	
B	-----	0.406	-----	10.30	
C	0.100	0.112	2.55	2.85	
D	0.248	0.272	6.30	6.90	
E	-----	0.161	-----	4.10	
F	0.500	0.543	12.70	13.80	
G	-----	0.200	-----	5.10	
H	-----	0.035	-----	0.90	
I	-----	0.032	-----	0.80	
J	0.102	0.134	2.60	3.40	Φ
K	-----	0.189	-----	4.80	
L	-----	0.123	-----	3.10	
M	0.098	0.114	2.50	2.90	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

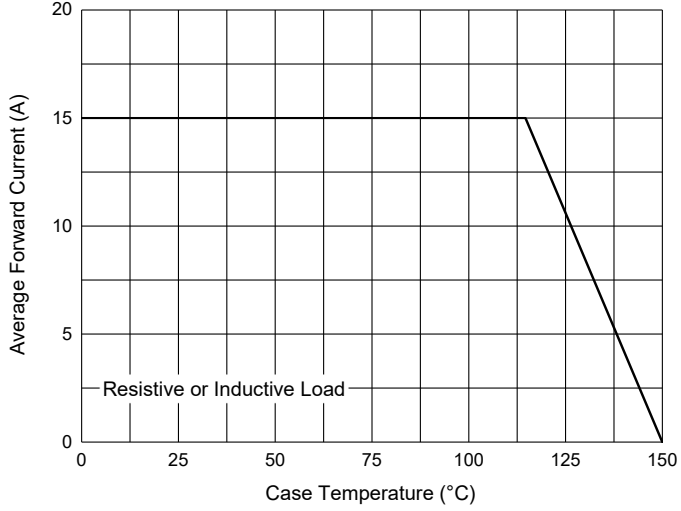


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

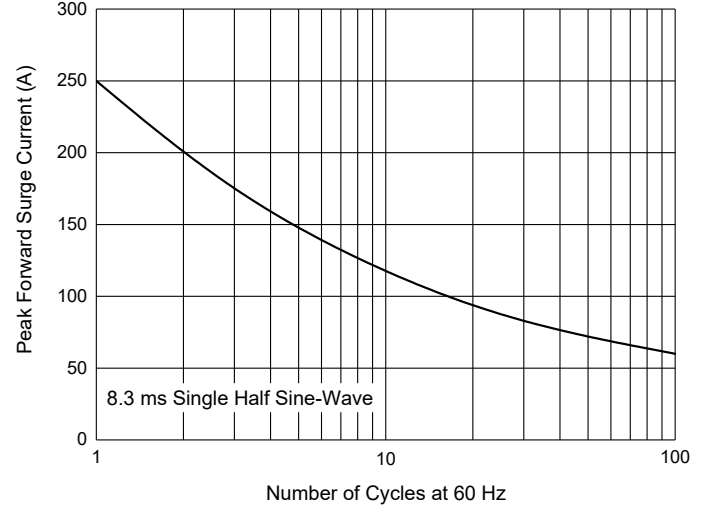


Fig. 3 - Typical Instantaneous Forward Characteristics

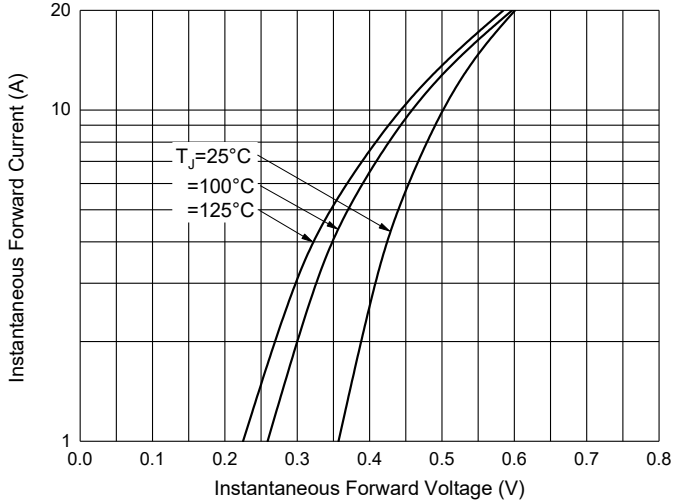
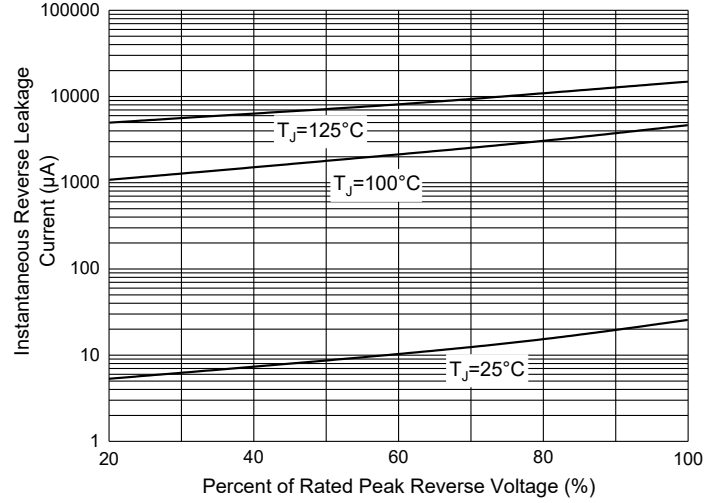


Fig. 2 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube, 1Kpcs/Box, 5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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